

985
SEARCH REQUEST FORM

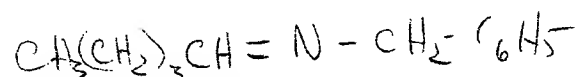
4/206

Requestor's Name: Don Wilson Serial Number: 09/097,035
Date: 12/15/99 Phone: 308-2398 Art Unit: 1713

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Please do a search for



N-butylidene benzyl amine

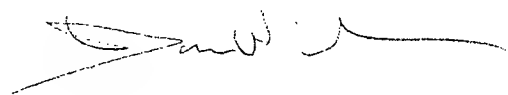
I am particularly interested in reaction of this compound with the end-group of anionically polymerized polymers such as polybutadiene, which has been polymerized with an organo-lithium reagent.

Disseminators:

James A. Krom

Xiaorong Wang

Thanks, in advance



STAFF USE ONLY

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CPU time: _____
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Type of Search

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☐ Structure
☒ Bibliographic

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☒ STN 107
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☐ APS
☐ Geninfo
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=> D L21

L21 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1999 ACS
RN 56249-61-7 REGISTRY
CN Benzenemethanamine, N-butyldiene- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzylamine, N-butyldiene- (7CI)
OTHER NAMES:
CN **N-Butyldienebenzylamine** ✕
FS 3D CONCORD
MF C11 H15 N
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, TOXLIT
(*File contains numerically searchable property data)

n-Pr-CH=N-CH₂-Ph

31 REFERENCES IN FILE CA (1967 TO DATE)
31 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> D HIS L22

(FILE 'REGISTRY' ENTERED AT 16:18:57 ON 21 DEC 1999)

FILE 'REGISTRY' ENTERED AT 16:20:08 ON 21 DEC 1999
L22 0 S 56249-61-7/CRN

=> FILE HCAPLUS

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FILE COVERS 1967 - 21 Dec 1999 VOL 131 ISS 26

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*not found as a component
registry number (part
of a polymer)*

FILE LAST UPDATED: 20 Dec 1999 (19991220/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> D QUE L26

L21 1 SEA FILE=REGISTRY ABB=ON N-BUTYLIDENEBENZYLAMINE/CN
L23 31 SEA FILE=HCAPLUS ABB=ON L21
L26 1 SEA FILE=HCAPLUS ABB=ON L23 AND (POLYMER? OR PLASTIC?)/SC, SX, A
B, BI

=> D ALL

↓ one ca ref from the 31 ref's on the compound on polymers

L26 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:499362 HCAPLUS
DN 129:230336
TI Catalytic C:N bond formation by metal-imide-mediated imine metathesis
AU Cantrell, Gidget K.; Meyer, Tara Y.
CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA
SO J. Am. Chem. Soc. (1998), 120(32), 8035-8042
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
CC 22-4 (Physical Organic Chemistry)
AB Mo bis(imide) complexes of the general formula (DME)Mo(:NR)2Cl2 (I) catalytically metathesize acyclic imine substrates. This C:N bond-forming reaction has significant implications for the synthesis of small mols. by ring-closing metathesis and **polymers** by ring-opening metathesis. A series of closely related :NR-transfer reactions was examd. in an effort to fully understand the process. [MeC(CF3)2O]2Mo(:CHR')[:NC6H3(CHMe2)2-2,6] underwent alkylidene/imine exchange with a variety of imines in situ to give a mixed bis(imide) product and an olefin. The reactivity decreased if the alkoxide substituents were changed for more electron-donating ones. I [R = C6H3(CHMe2)2-2,6 (II), CMe3 (III)] reacted with imines in an imide/imine metathesis to give mixed bis(imide) complexes and new imines. The reaction rates depended strongly on the steric demands of the imide NR substituent. Replacement of the Cl atoms in I with more electron-donating alkoxide ligands inhibited the reactions. II and III also exchanged imide ligands with each other (imide/imide metathesis). Finally, II and III catalytically metathesized mixts. of 2 imines at 80.degree. in 105 and 22 h, resp. This reaction is mediated by the presence of unique initiation products in catalytic mixts. A catalytic cycle is proposed, and the nature of the mechanism is discussed in terms of the data gathered on all of the metatheses.
ST imide metathesis molybdenum complex catalyst
IT Double bond
(carbon-nitrogen; catalytic C:N bond formation by metal-imide-mediated imine metathesis)
IT Imines
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(catalytic C:N bond formation by metal-imide-mediated imine metathesis)
IT Metathesis
Metathesis catalysts
Metathesis kinetics

(imine; catalytic C:N bond formation by metal-imide-mediated imine metathesis)

IT 212688-41-0
RL: RCT (Reactant)
(attempted catalytic C:N bond formation by metal-imide-mediated imine metathesis)

IT 6852-58-0P, 2-Propanamine, 2-methyl-N-(phenylmethylene)-
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(attempted catalytic C:N bond formation by metal-imide-mediated imine metathesis)

IT 126949-60-8 141198-25-6
RL: CAT (Catalyst use); RCT (Reactant); USES (Uses)
(catalytic C:N bond formation by metal-imide-mediated imine metathesis)

IT 6852-55-7, Propylamine, N-benzylidene- 26029-60-7, Benzenamine, N-(2,2-dimethylpropylidene)- 56249-61-7, Benzylamine, N-butylidene- 56951-64-5, 2-Propanamine, N-hexylidene-2-methyl- 108945-98-8 108969-03-5 152507-75-0, 1-Propanamine, N-hexylidene-
RL: RCT (Reactant)
(catalytic C:N bond formation by metal-imide-mediated imine metathesis)

IT 538-51-2P 7707-71-3P, 1-Propanamine, N-butylidene-
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(catalytic C:N bond formation by metal-imide-mediated imine metathesis)

IT 1432-48-0P, 2-Propanamine, N-(2,2-dimethylpropylidene)-2-methyl- 3846-66-0P, Benzene, (3,3-dimethyl-1-butenyl)-, E- 117696-79-4P, Benzenamine, 2,6-bis(1-methylethyl)-N-(phenylmethylene)- 195866-44-5P, Benzenamine, N-(2,2-dimethylpropylidene)-2,6-bis(1-methylethyl)- 199481-77-1P 199481-82-8P 199481-85-1P 212688-38-5P 212688-39-6P 212688-42-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(catalytic C:N bond formation by metal-imide-mediated imine metathesis)

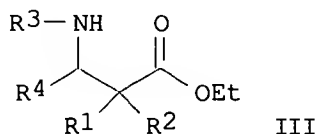
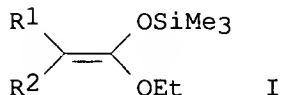
=> S L23 NOT L26

L27 30 L23 NOT L26

=> D L27 BIB ABS 1-30

Printed the remaining 30 CA ref's on this compound

L27 ANSWER 1 OF 30 HCAPLUS COPYRIGHT 1999 ACS
AN 1999:446788 HCAPLUS
DN 131:129537
TI Highly diastereoselective addition reaction of ketene silyl acetals to imines catalyzed by samarium(III) iodide
AU Hayakawa, Ryuichirou; Shimizu, Makoto
CS Department of Chemistry for Materials, Mie University, Mie, 514-8507, Japan
SO Chem. Lett. (1999), (7), 591-592
CODEN: CMLTAG; ISSN: 0366-7022
PB Chemical Society of Japan
DT Journal
LA English
OS CASREACT 131:129537
GI



AB In the presence of a catalytic amt. of samarium(III) iodide, the addn. reaction of ketene silyl acetals I (R1,R2 = H,H; H,Me; Me,Me) to achiral imines R3N:CHR4 (II; R3 = p-MeOC6H4, PhCH2; R4 = Ph, n-Pr, 2-furyl, PhCH:CH) affords the corresponding .beta.-amino esters III with high anti selectivity for R1, R2 = H,Me. The reaction of chiral imines II [R3 = p-MeOC6H4; R4 = 2-methyl-4(S),5(S)-bis(methoxymethyl)dioxolan-2-yl, (S)-Me3CSiMe2OCHPh] under the same conditions gives .beta.-amino esters with high diastereoselectivity.

L27 ANSWER 2 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1999:435028 HCAPLUS

DN 131:170288

TI Synthesis of oxazolidine derivatives by the reaction of imines with epoxides in the presence of lanthanide complexes

AU Nishitani, Takayuki; Shiraishi, Hiroyuki; Sakaguchi, Satoshi; Ishii, Yasutaka

CS Department of Applied Chemistry, Faculty of Engineering & High Technology Research Center, Kansai University, Suita, 564-8680, Japan

SO Kidorui (1999), 34, 310-311

CODEN: KIDOEP; ISSN: 0910-2205

PB Nippon Kidorui Gakkai

DT Journal

LA Japanese

OS CASREACT 131:170288

AB The cycloaddn. reaction of imines with epoxides in the presence of lanthanide complexes was examd. A mixt. of N-(1-methyl)ethylidenbenzylamine and isobutylene oxide in THF was allowed to react under the influence of SmI2 at room temp., giving N-benzyl-2,2,4,4-tetramethyloxazolidine in good yield. Among the lanthanide compds. employed, SmI2 was found to be the most efficient catalyst.

L27 ANSWER 3 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1996:687226 HCAPLUS

DN 125:327716

TI Organic syntheses over titanium catalysts

IN Sato, Fumie

PA Nissan Chemical Industries, Ltd., Japan

SO PCT Int. Appl., 232 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | WO 9628250 | A1 | 19960919 | WO 1996-JP578 | 19960308 |
| | W: AU, CA, CN, CZ, HU, JP, KR, NO, RO, RU, SK, UA, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9648900 | A1 | 19961002 | AU 1996-48900 | 19960308 |
| | EP 820809 | A1 | 19980128 | EP 1996-905041 | 19960308 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |

PRAI JP 1995-79685 19950310

WO 1996-JP578 19960308

OS CASREACT 125:327716; MARPAT 125:327716

AB Org. syntheses involving reaction between unsatd. carbon compds. and compds. having an electrophilic functional group were catalyzed by TiX1X2X3X4 [X1-X4 = halo, C1-20 alkoxy, aralkoxy, aryloxy or NRxRy (wherein Rx, Ry = C1-20 alkyl or aralkyl), any of X1, X2, X3 and X4 may form a ring together with the others] optionally in the presence of 1.5-2.5 mol equiv R1MgX5 (R1 = C2-10 alkyl having a H atom at the .beta.-position; X5 = halo). A soln. of 2.0 mmol iso-PrMgBr in Et2O was added to a soln. of 1.0 mmol (iso-PrO)4Ti and 1.0 mmol allyl bromide in Et2O at -50.degree. with stirring, followed by 0.7 mmol PhCHO with

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stirring at -45.degree. to -40.degree. and the soln. was worked up to give 94% 1-phenyl-3-buten-1-ol.

L27 ANSWER 4 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1996:412011 HCAPLUS

DN 125:167616

TI A catalytic amount of titanium tetrahalide as promoter for the addition reaction of silyl ketene acetals to imines

AU Shimizu, Makoto; Kume, Kouji; Fujisawa, Tamotsu

CS Dep. Chem. mater., Mie Univ., Mie, 514, Japan

SO Chem. Lett. (1996), (7), 545-546

CODEN: CMLTAG; ISSN: 0366-7022

DT Journal

LA English

OS CASREACT 125:167616

AB In the presence of a catalytic amt. of $TiBr_4$ or TiI_4 , the reaction of silyl ketene acetals with imines smoothly proceeds to give the corresponding .beta.-amino esters in high yield with high anti-selectivity.

L27 ANSWER 5 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1996:28816 HCAPLUS

DN 124:202441

TI Novel addition reaction of $HGeCl_3$ to imine and the stability of the corresponding products and their derivatives

AU Mao, Li Juan; Chen, Ru Yu; Zhang, Wei; He, Da Yong

CS Research Institute of Elemento-Organic Chemistry, Nankai University, Tianjin, 300071, Peop. Rep. China

SO Chin. Chem. Lett. (1995), 6(12), 1025-8

CODEN: CCLEE7

DT Journal

LA English

AB Efficiently direct addn. of $HGeCl_3$ to imine has been investigated, affording excellent yield of the products. The reaction conditions are the key factor for whether the reaction will successfully occur. It is also been found that the germatrane is another kind of stable deriv. besides its sesquioxide. Thus, addn. reaction of $RCH:NCH_2Ph$ with $HGeCl_3$ at -15.degree. in weak-polarity mixed solvents gave $[RCH(GeCl_3)NHCH_2Ph]$ (R = alkyl, substituted Ph) which were not stable and converted to stable products like sesquioxides and germatranes.

L27 ANSWER 6 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:900666 HCAPLUS

DN 124:116318

TI Yb/TMSBr promoted homocoupling reactions of aliphatic ketones, .alpha.,.beta.-unsaturated ketones and aliphatic imines

AU Taniguchi, Yuki; Kuno, Tatsuhiro; Nakahashi, Manabu; Takaki, Ken; Fujiwara, Yuzo

CS Dept. Applied Chem., Hiroshima Univ., Hiroshima, 739, Japan

SO Appl. Organomet. Chem. (1995), 9(5 & 6), 491-503

CODEN: AOCHEX; ISSN: 0268-2605

DT Journal

LA English

OS CASREACT 124:116318

AB A powerful reducing reagent, ytterbium dibromide ($YbBr_2$), was synthesized by a new method using ytterbium metal and trimethylsilyl bromide ($TMSBr$) in tetrahydrofuran-hexamethylphosphoramide (THF-HMPA). $YbBr_2$, thus formed in situ, causes coupling reactions of aliph. ketones, .alpha.,.beta.-unsatd. ketones and aliph. aldimines to give bis-silylated 1,2-diols, 1,6-diketones and 1,2-diamines, resp., in good yields. In the case of aliph. ketimines, the corresponding reduced and silylated amines are obtained. In this solvent system, the trialkylsilyl moiety of trialkylsilyl bromide is converted to trialkylsilanes quant. These results show that the $Yb/TMSBr$ reagent generates $YbBr_2$ in situ and the

YbBr₂ thus formed acts as a single-electron reductant for these coupling reactions.

L27 ANSWER 7 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:760460 HCAPLUS

DN 123:338595

TI Stereoselective synthesis of allylic amines by the reaction of titanium-alkyne complexes with imines

AU Gao, Yuan; Harada, Kousuke; Sato, Fumie

CS Dep. Biomol. Eng., Tokyo Inst. Technol., Yokohama, 226, Japan

SO Tetrahedron Lett. (1995), 36(33), 5913-16

CODEN: TELEAY; ISSN: 0040-4039

DT Journal

LA English

OS CASREACT 123:338595

AB Titanium-alkyne complexes, readily prep'd. in situ by the reaction of alkynes with Ti(O-*i*-Pr)₄/2 *i*-PrMgBr, reacted with imines, metallo-imines of hydrazones under mild conditions to provide the corresponding addn. products in excellent to good yields, thus providing highly efficient access to allylic amines or their derivs.

L27 ANSWER 8 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:653288 HCAPLUS

DN 123:313477

TI Tris(pentafluorophenyl)boron as an efficient, air stable, and water-tolerant Lewis acid catalyst

AU Ishihara, Kazuaki; Hanaki, Naoyuki; Funahashi, Miyuki; Miyata, Mayumi; Yamamoto, Hisashi

CS Sch. Engineering, Nagoya Univ., Nagoya, 464-01, Japan

SO Bull. Chem. Soc. Jpn. (1995), 68(6), 1721-30

CODEN: BCSJA8; ISSN: 0009-2673

DT Journal

LA English

OS CASREACT 123:313477

AB Tris(pentafluorophenyl)boron is an efficient, air stable, and water tolerant Lewis acid catalyst for the aldol-type and Michael reactions of silyl enol ethers with carbonyl compds. or other electrophiles (tri-Me orthoformate, di-Me acetal, and chloromethyl Me ether), the allylation reaction of allylsilanes with aldehydes, and the Diels-Alder reaction of dienes with .alpha.,.beta.-unsatd. aldehydes. A soln. of formaldehyde in water is applicable as an electrophile. Also, the aldol-type reaction of ketene silyl acetals with arom. or aliph. imines is successfully carried out using the same catalyst.

L27 ANSWER 9 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:578957 HCAPLUS

DN 123:82530

TI Preparations of Secondary Amines and .beta.-Amino Esters via Additions of Grignard and Reformatsky Reagents to Imines and by One-Pot Reactions of Primary Amines, Aldehydes, and Grignards

AU Katritzky, Alan R.; Hong, Qingmei; Yang, Zhijun

CS Center for Heterocyclic Compounds, University of Florida, Gainesville, FL, 32611-7200, USA

SO J. Org. Chem. (1995), 60(11), 3405-8

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

AB Addns. of Grignard and Reformatsky reagents to imines in the presence of 1-(trimethylsilyl)benzotriazole afforded in good yields the corresponding secondary amines and .beta.-amino esters. The procedure is general as imines contg. hydrogens .alpha. to both carbon and nitrogen can be employed. Extensions of this method to include imines contg. other Lewis basic centers, e.g., those derived from furan-, thiophene-, indole-, and p-methoxybenzenecarboxaldehyde, have been successful in avoiding the

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potential complications which could result from the use of a Lewis acid as the activating species. The imines need not be isolated, and a one-pot method for the synthesis of secondary amines from aldehydes, primary amines, and Grignard reagents is described.

L27 ANSWER 10 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:286872 HCAPLUS

DN 122:132514

TI Preparation of YbBr₂ and its reaction with aliphatic imines

AU Taniguchi, Yuki; Kuno, Tatsuhiro; Kakahashi, Manabu; Takaki, Ken; Fujiwara, Yuzo

CS Department of Applied Chemistry, Faculty of Engineering, Hiroshima University, Kagamiyama, Higashi-Hiroshima, 724, Japan

SO J. Alloys Compd. (1994), 216(1), L9-L12

CODEN: JALCEU; ISSN: 0925-8388

DT Journal

LA English

OS CASREACT 122:132514

AB A powerful reducing reagent, ytterbium dibromide (YbBr₂), was synthesized by a new method. Treatment of ytterbium metal with trialkylsilyl bromide in THF/HMPA affords YbBr₂. In this solvent system, the trialkylsilyl moiety of trialkylsilyl bromide is converted to trialkylsilanes quant. The YbBr₂ obtained reacts with aliph. aldimines, e.g., Me₂CHCH:NCH₂Ph, to give the homocoupling adducts, e.g., 1,2-diamine [PhCH₂NHCH(CHMe₂)]₂, in excellent yields. In the case of aliph. ketimines, the corresponding reduced and silylated amines are obtained. These results show that the Yb/TMS-Br reagent generates YbBr₂ in situ and thus the YbBr₂ formed acts as a single electron reductant for these coupling reactions.

L27 ANSWER 11 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:270826 HCAPLUS

DN 123:197936

TI Tris(pentafluorophenyl)borane as an efficient catalyst in the aldol-type reaction of ketene silyl acetals with imines

AU Ishihara, Kazuaki; Funahashi, Miyuki; Hanaki, Naoyuki; Miyata, Mayumi; Yamamoto, Hisashi

CS School Engineering, Nagoya Univ., Nagoya, 464-01, Japan

SO Synlett (1994), (11), 963-4

CODEN: SYNLES; ISSN: 0936-5214

DT Journal

LA English

OS CASREACT 123:197936

AB The aldol-type reaction of ketene silyl acetals with arom. or aliph. imines is successfully carried out using tris(pentafluorophenyl)borane as a catalyst (0.2.apprx.10 mol%). The aldol condensation of [[1-(1,1-dimethylethoxy)ethenyl]oxy]trimethylsilane (ketene silyl acetal) and N-(phenylmethylene)benzenamine (imine) gave 3-[(phenylmethyl)amino]benzenepropanoic acid 1,1-dimethylethyl ester.

L27 ANSWER 12 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:265821 HCAPLUS

DN 122:80808

TI Rare earth/silyl halide-promoted homocoupling reaction of aliphatic ketones and imines.

AU Kuno, T.; Nakahashi, M.; Taniguchi, Y.; Takaki, K.; Fujiwara, Y.

CS Faculty Engineering, Hiroshima University, Higashi-Hiroshima, Japan

SO Kidorui (1993), 22, 50-1

CODEN: KIDOEP; ISSN: 0910-2205

DT Journal

LA Japanese

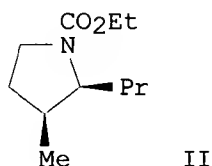
AB A new reducing reagent, Yb metal-trimethylbromosilane, has been explored for the reaction of aliph. ketones and imines. .alpha., .beta.-Unsatd. ketones are easily reduced with the reagent to give 1,6-diketones in good yields. Pinacol derivs. are also formed from aliph. ketones. In addn.,

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aliph. aldimines and ketimines are converted to the corresponding diaminoethanes and amines, resp.

L27 ANSWER 13 OF 30 HCAPLUS COPYRIGHT 1999 ACS
 AN 1995:229662 HCAPLUS
 DN 122:80680
 TI 1-(Trimethylsilyl)benzotriazole-Assisted Addition of Grignard Reagents to Imines: A Versatile Approach to Aliphatic Secondary Amines
 AU Katritzky, Alan R.; Hong, Qingmei; Yang, Zhijun
 CS Center for Heterocyclic Compounds, University of Florida, Gainesville, FL, 32611-7200, USA
 SO J. Org. Chem. (1994), 59(26), 7947-8
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 OS CASREACT 122:80680
 AB 1-(Trimethylsilyl)benzotriazole-assisted Grignard addn. to imines is described. Thus, equimolar amts of 1-(trimethylsilyl)benzotriazole and RCH:NCH₂R₁ (R = Me₂CH, Pr, 4-MeC₆H₄; R₁ = heptyl, PhCH₂, Ph) were treated with R₂MgX (R₂ = Ph, PhCH₂, Me, Bu) to give 60-93% RCHR₂NHCH₂R₁.

L27 ANSWER 14 OF 30 HCAPLUS COPYRIGHT 1999 ACS
 AN 1994:217817 HCAPLUS
 DN 120:217817
 TI Highly Stereoselective Ene Reaction of Aldimines with 2-(Alkylthio)allyl Silyl Ethers
 AU Tohyama, Yoshitomo; Tanino, Keiji; Kuwajima, Isao
 CS Department of Chemistry, Tokyo Institute of Technology, Tokyo, 152, Japan
 SO J. Org. Chem. (1994), 59(3), 518-19
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 OS CASREACT 120:217817
 GI

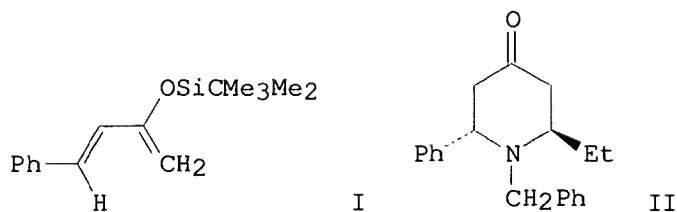


AB A stereoselective ene reaction of aldimines with 2-(alkylthio)allyl silyl ethers was developed. Under the influence of Lewis acids, N-acylimine or geminal biscarbamates reacted with a (Z)-2-(methylthio)allyl silyl ether to afford syn adducts in >94% selectivity. E.g., BF₃.OEt₂ catalyzed the reaction of (EtO₂CNH)CH₂Pr and (Z)-MeCH:C(SMe)CH₂OSiMe₂CMe₃ to give an 89% yield of EtO₂CNHCH₂PrCHMeC(SMe):CHOSiMe₂CMe₃ (I, 94:6 syn:anti). Treating I with Et₃SiH/CF₃CO₂H, followed by desulfurization with Raney Ni, gave pyrrolidine II.

L27 ANSWER 15 OF 30 HCAPLUS COPYRIGHT 1999 ACS
 AN 1994:106718 HCAPLUS
 DN 120:106718
 TI [4+2]Type cycloaddition of aldimines bearing .alpha.-hydrogens with 2-siloxy-1,3-butadienes catalyzed by trimethylsilyl triflate
 AU Akiba, Kinya; Motoshima, Toshihiro; Ishimaru, Kaori; Yabuta, Katunori; Hirota, Hiroshi; Yamamoto, Yohsuke
 CS Fac. Sci., Hiroshima Univ., Higashi-Hiroshima, 724, Japan
 SO Synlett (1993), (9), 657-9
 CODEN: SYNLES; ISSN: 0936-5214

KATHLEEN FULLER STIC LIBRARY 308-4290

BT Journal
 LA English
 OS CASREACT 120:106718
 GI



AB [4+2]Type cycloaddn. of unactivated imines bearing .alpha.-hydrogens with 2-siloxy-1,3-butadienes was performed efficiently by using trimethylsilyl triflate as catalyst. The relative stereochem. in the major diastereomers of the cycloadducts was assigned to be trans between C(2) and C(6) substituents. For example, the reaction of EtHC:NCH₂Ph with (E)-2-[(tert-butyldimethyl)siloxy]-4-phenyl-1,3-butadiene (I) gave after cycloaddn. and desilylation trans-1-benzyl-2-ethyl-6-phenyl-4-piperidinone (II) as the major product.

L27 ANSWER 16 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1993:449018 HCAPLUS

DN 119:49018

TI Efficient catalysis of acidic montmorillonite on addition of silyl ketene acetal to imine

AU Onaka, Makoto; Ohno, Ryosuke; Yanagiya, Narutoshi; Izumi, Yusuke

CS Fac. Eng., Nagoya Univ., Nagoya, 464, Japan

SO Synlett (1993), (2), 141-2

CODEN: SYNLES; ISSN: 0936-5214

DT Journal

LA English

OS CASREACT 119:49018

AB Strongly acidic clay montmorillonite was found to be an excellent catalyst for addns. of silyl ketene acetals to imines. Comparison was also made of catalysis between the clay and trimethylsilyl triflate. Thus, stereoselective addn. of 80:20 or 32:68 E/Z MeCH:C(OSiMe₃)OEt to PhCH:NPh catalyzed by Fe-exchanged montmorillonite afforded 97% PhCH(NHPh)CHMeCO₂Et in 96:4 erythro:threo ratio.

L27 ANSWER 17 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1992:105918 HCAPLUS

DN 116:105918

TI Mild convenient one-pot synthesis of .beta.-lactams by condensation of titanium enolates of 2-pyridylthioesters with imines

AU Cinquini, Mauro; Cozzi, Franco; Cozzi, Pier Giorgio; Consolandi, Emanuela

CS Dip. Chim. Org. Ind., Univ. Milan, Milan, 20133, Italy

SO Tetrahedron (1991), 47(41), 8767-74

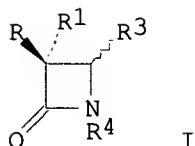
CODEN: TETRAB; ISSN: 0040-4020

DT Journal

LA English

OS CASREACT 116:105918

GI



AB Reaction of RR_1CHCOR_2 ($R = \text{Me, Et, CHMe}_2, \text{OCH}_2\text{Ph}$; $R_1 = \text{H, Me}$; $R_2 = 2\text{-pyridyl}$) with Et_3N in the presence of TiCl_4 affords titanium enolates that add to $R_3\text{CH:NR}_4$ [$R_3 = \text{Ph, Pr, (E)-CH:CHPh}$; $R_4 = \text{CH}_2\text{Ph, C}_6\text{H}_4\text{OMe-4}$] to give 52-99% β -lactams I with moderate to good stereoselectivity.

L27 ANSWER 18 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1991:655934 HCAPLUS

DN 115:255934

TI Alkylation of N-benzyl aldimines by butadiene in the presence of catalytic amounts of sodium

AU Kazaryan, A. Ts.; Geoletsyan, A. N.; Nonezyan, N. G.; Akopyan, S. K.; Martirosyan, G. T.

CS Nauchno-Proizvod. Ob'edin. "Nairit", Yerevan, USSR

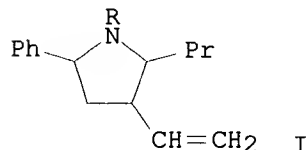
SO Arm. Khim. Zh. (1991), 44(2), 93-105

CODEN: AYKZAN; ISSN: 0515-9628

DT Journal

LA Russian

GI



AB The alkylation of N-butylidene- and N-isoamylidene benzyl amines and their prototropic isomers: N-benzylidene butylamine and N-benzylidene isoamylamine by butadiene in the presence of catalytic amts. of sodium gives mainly alkylvinylphenyl pyrrolidines I ($R = \text{H}$).

L27 ANSWER 19 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1990:611459 HCAPLUS

DN 113:211459

TI Oxidation of N-benzylidenealkylamines and N-alkylidenebenzylamines with oxygen in an alkaline aprotic medium

AU Grigoryan, G. S.; Tovmasyan, V. S.; Malkhasyan, A. Ts.; Martirosyan, G. T.; Beletskaya, I. P.

CS NPO "Nairit", Yerevan, USSR

SO Zh. Org. Khim. (1990), 26(4), 809-14

CODEN: ZORKAE; ISSN: 0514-7492

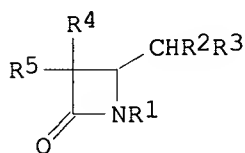
DT Journal

LA Russian

AB Oxidn. of $\text{N-EtCH}_2\text{CH:NCH}_2\text{Ph}$ by oxygen in DMSO or THF catalyzed by KOH or KOCMe_3 in the presence of 18-crown-6 gave the isomeric starting imine and 30% of a mixt. contg. $\text{PrCH:CEtCH}_2\text{N:CPh}$ and BuCEt:CHN:CHPh . The latter two are apparently formed via a concurrent condensation reaction. Conjugate oxidn.-redn. of $\text{Me}_2\text{CHCH:NCH}_2\text{Ph}$ and $\text{Me}_2\text{CHCH}_2\text{N:CHPh}$ in basic aprotic medium gave 60% $\text{Me}_2\text{CHCH:NCH(OH)Ph}$.

L27 ANSWER 20 OF 30 HCAPLUS COPYRIGHT 1999 ACS
 AN 1989:496964 HCAPLUS
 DN 111:96964
 TI Preparation of 2-azetidinone derivatives as intermediates for
 antibacterials
 IN Akiba, Kinya; Wada, Makoto
 PA Fujisawa Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

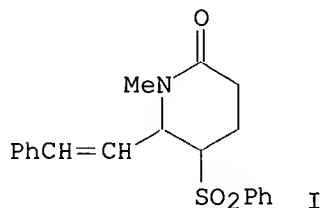
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|-----------------|----------|
| PI | JP 64000066 | A2 | 19890105 | JP 1988-33283 | 19880216 |
| PRAI | JP 1987-38538 | | 19870220 | | |
| OS | MARPAT 111:96964 | | | | |
| GI | | | | | |



I

AB The title compds. [I; R1 = H, aralkyl, protecting radical; R2, R4, R5 = H, alkyl; R3 = H, halo, org. group], useful as intermediates for antibacterials, are prepd. via reaction of R1N:CHCHR2R3 with R4R5CHCO2R6 (R6 = ester residue). PrCH:NCH2CH2Ph reacted with a soln. of MeCHLiCO2Et (obtained from BuLi and EtCO2Et) in hexane contg. Me2AlCl at low temp. (not specified) overnight to give I (R1 = CH2CH2Ph, R2 = R5 = H, R3 = Et, R4 = Me).

L27 ANSWER 21 OF 30 HCAPLUS COPYRIGHT 1999 ACS
 AN 1988:610866 HCAPLUS
 DN 109:210866
 TI Remote dianions. 3. Novel synthesis of substituted 2-piperidones from imines
 AU Thompson, Charles M.; Green, Diana L. C.; Kubas, Robert
 CS Dep. Chem., Loyola Univ. Chicago, Chicago, IL, 60626, USA
 SO J. Org. Chem. (1988), 53(22), 5389-90
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA English
 OS CASREACT 109:210866
 GI



I

AB A general and versatile method that extends the synthetic utility of Lewis
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acid promoted addns. to imines is described for the prepn. of 2-piperidone derivs. The addn. of the dianion of $\text{PhSO}_2(\text{CH}_2)_3\text{CO}_2\text{H}$ to readily available imines is followed by cyclization in situ with the aid of $(\text{CF}_3\text{CO})_2\text{O}$ to the title heterocycles. These 5-phenylsulfonyl-6-alkyl(aryl)-2-piperidone derivs., e.g. I, may be reductively converted to the alkyl(aryl)piperidine or 2-piperidone derivs. in good yield.

L27 ANSWER 22 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1988:131365 HCAPLUS

DN 108:131365

TI A new synthesis of .beta.-lactams from lithium ester enolates and enolizable aldimines

AU Wada, Makoto; Aiura, Hideki; Akiba, Kinya

CS Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan

SO Tetrahedron Lett. (1987), 28(29), 3377-80

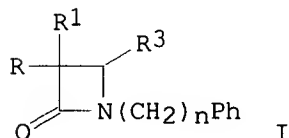
CODEN: TELEAY; ISSN: 0040-4039

DT Journal

LA English

OS CASREACT 108:131365

GI



AB $\text{RR}_1\text{C}:\text{C}(\text{OLi})\text{OR}_2$ ($\text{R} = \text{H}, \text{Me}, \text{CHMe}_2$; $\text{R}_1 = \text{H}, \text{Me}$; $\text{R}_2 = \text{Me}, \text{Et}$) reacted with $\text{R}_3\text{CH}:\text{N}(\text{CH}_2)_n\text{Ph}$ ($\text{R}_3 = \text{Pr}, \text{CHMe}_2$; $n = 1, 2$) in the presence of Me_2AlCl to afford .beta.-lactams I in good yields.

L27 ANSWER 23 OF 30 HCAPLUS COPYRIGHT 1999 ACS

AN 1987:554186 HCAPLUS

DN 107:154186

TI Synthesis of pyrrolidine derivatives by improved aminoselenation via addition of the boron trifluoride complex of dihomoaallylcuprate to aldimines containing .alpha.-hydrogen

AU Wada, Makoto; Aiura, Hideki; Akiba, Kinya

CS Fac. Sci., Hiroshima Univ., Higashisenda-machi, 730, Japan

SO Heterocycles (1987), 26(4), 929-34

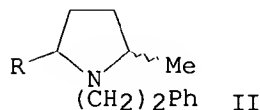
CODEN: HTCYAM; ISSN: 0385-5414

DT Journal

LA English

OS CASREACT 107:154186

GI



AB $(\text{CH}_2:\text{CHCH}_2\text{CH}_2)_2\text{CuMgBr}.\text{BF}_3$ reacted with aldimines, e.g., $\text{Ph}(\text{CH}_2)_n\text{N}:\text{CHR}$ ($\text{R} = \text{Pr}, \text{CHMe}_2$), to afford the corresponding addn. products, e.g., $\text{Ph}(\text{CH}_2)_2\text{NHC}(\text{R})(\text{CH}_2)_2\text{CH}:\text{CH}_2$ (I) in good yields. I were converted to pyrrolidines II ($\text{R} = \text{Pr}, \text{CHMe}_2$) by treatment with PhSeCl in the presence of $\text{CF}_3\text{CO}_2\text{H}$ and silica gel.

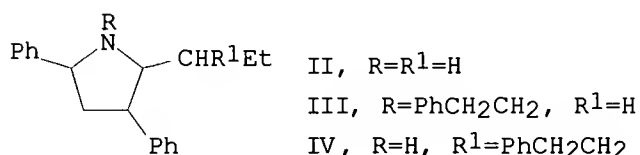
L27 ANSWER 24 OF 30 HCAPLUS COPYRIGHT 1999 ACS

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- AN 1986:5592 HCAPLUS
DN 104:5592
TI Addition of boron trifluoride complexes of alkylcopper, dialkylcuprate(I), and alkynyllithium to aldimines containing .alpha.-hydrogens
AU Wada, Makoto; Sakurai, Yoji; Akiba, Kinya
CS Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan
SO Nippon Kagaku Kaishi (1985), (3), 295-302
CODEN: NKAKB8; ISSN: 0369-4577
DT Journal
LA Japanese
OS CASREACT 104:5592
AB An efficient method for the nucleophilic addn. of organometallic reagents to imines is reported. $\text{RCu} \cdot \text{BF}_3$ (R = allenyl, phenethyl), generated in situ from Grignard reagents, CuI and $\text{BF}_3 \cdot \text{OEt}_2$, was added to aldimines without deprotonation of .alpha.-hydrogen to give 57-85% secondary amines. $\text{R}_2\text{Cu} \cdot \text{BF}_3$ gave essentially the same results with wider application. Alkynyltrifluoroborates, prepd. in situ from alkynyllithium and $\text{BF}_3 \cdot \text{Et}_2\text{O}$, were added to aldimines contg. .alpha.-H to give 57-.apprx.82% .alpha.-(1-alkynyl)amines.
- L27 ANSWER 25 OF 30 HCAPLUS COPYRIGHT 1999 ACS
AN 1984:490486 HCAPLUS
DN 101:90486
TI Addition of alkynyl anions to aldimines containing .alpha.-hydrogens: a novel synthesis of .beta.-aminoacetylenes
AU Wada, Makoto; Sakurai, Yoji; Akiba, Kinya
CS Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan
SO Tetrahedron Lett. (1984), 25(10), 1083-4
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
AB Alkynylboranes (or alkynylborates), prepd. in situ from $\text{C}_2\text{H}_5\text{Li}$; and $\text{BF}_3 \cdot \text{Et}_2\text{O}$, added to aldimines contg. .alpha.-H to afford .beta.-aminoacetylenes in 57-82% yields.
- L27 ANSWER 26 OF 30 HCAPLUS COPYRIGHT 1999 ACS
AN 1984:406715 HCAPLUS
DN 101:6715
TI Addition of boron trifluoride complexes of organocopper reagents to aldimines containing .alpha.-hydrogens
AU Wada, Makoto; Sakurai, Yoji; Akiba, Kinya
CS Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan
SO Tetrahedron Lett. (1984), 25(10), 1079-82
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
AB $\text{RCu} \cdot \text{BF}_3$ (R = Me, Bu, phenethyl), generated in situ from Grignard reagents, CuI, and $\text{BF}_3 \cdot \text{Et}_2\text{O}$, added to aldimines contg. .alpha.-H to afford secondary amines in 54-85% yields. BF_3 complex of dialkylcuprate gave essentially the same result with wider application.
- L27 ANSWER 27 OF 30 HCAPLUS COPYRIGHT 1999 ACS
AN 1979:54135 HCAPLUS
DN 90:54135
TI Orientation in base-promoted dehydrohalogenation of N-benzyl-N-chlorobutylamine
AU Bartsch, Richard A.; Cho, Bong Rae
CS Dep. Chem., Texas Tech Univ., Lubbock, Tex., USA
SO J. Org. Chem. (1979), 44(1), 145-6
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
AB The dehydrochlorination of $\text{PhCH}_2\text{NClBu}$ by $\text{NaOMe} \cdot \text{MeOH}$, $\text{NaOEt} \cdot \text{EtOH}$, $\text{KOCMe}_3 \cdot \text{Me}_3\text{COH}$ and -hexane gave PhCH:NBu with no detectable $\text{PhCH}_2\text{N:CHPr}$.

An E2 mechanism with considerable C-N double-bond development in the transition state was suggested. The KOCMe3-hexane system completed the reaction much faster than the other systems.

L27 ANSWER 28 OF 30 HCAPLUS COPYRIGHT 1999 ACS
 AN 1978:74259 HCAPLUS
 DN 88:74259
 TI Alkylation of N-benzylalldimines with styrene
 AU Kazaryan, A. Ts.; Misaryan, S. O.; Grigoryan, E. A.; Martirosyan, G. T.
 CS Erevan. Med. Inst., Yerevan, USSR
 SO Arm. Khim. Zh. (1977), 30(8), 674-9
 CODEN: AYKZAN
 DT Journal
 LA Russian
 GI



AB N-alkylidenebenzylamines PhCH₂N:CHCH₂R [R = H, Me, Et (I), iso-Pr] underwent [3 + 2] cycloaddn. with styrene to give pyrrolidines. Products resulting from C- and N-alkylation were also formed. E.g., a 1:1 mixt. of I and styrene gave 62% II, 16% a mixt. of III and IV, and 8% H₂NCH₂CHEtCH₂CH₂Ph.

L27 ANSWER 29 OF 30 HCAPLUS COPYRIGHT 1999 ACS
 AN 1977:457539 HCAPLUS
 DN 87:57539
 TI Gas chromatographic analysis of lower aliphatic carbonyl compounds using the imine formation reaction
 AU Hoshika, Yasuyuki; Kozima, Ichiro; Koike, Kazumi; Yoshimoto, Kenji
 CS Aichi Environ. Res. Cent., Nagoya, Japan
 SO Aichi-ken Kogai Chosa Senta Shoho (1976), 4, 108-13
 CODEN: AKCSD3
 DT Journal
 LA Japanese
 AB Carbonyl compds. were identified in cigarette smoke and automotive exhaust by gas chromatog. using the imine formation reaction (reaction of carbonyl compds. with PhCH₂NH₂). Acetaldehyde [75-07-0], propionaldehyde [123-38-6], and isobutyraldehyde [78-84-2], Me Et ketone [78-93-3], and Me isopropyl ketone [563-80-4] were detected in cigarette smoke at concns. 0.2-1.3 and 0.5-1.3 mg/cigarette for aldehydes and ketones, resp. AcH, EtCHO, butyraldehyde [123-72-8], crotonaldehyde [4170-30-3], valeraldehyde [110-62-3], and n-capronaldehyde [66-25-1] were identified in exhaust gases. The sensitivity of the imines is .apprx.10 times higher than that of free carbonyl compds.

L27 ANSWER 30 OF 30 HCAPLUS COPYRIGHT 1999 ACS
 AN 1975:458922 HCAPLUS
 DN 83:58922
 TI New route to aminonitriles via cyanosilylation of Schiff bases and oximes
 AU Ojima, Iwao; Inaba, Shinichi; Nakatsugawa, Kimiyo; Nagai, Yoichiro
 CS Sagami Chem. Res. Cent., Sagamihara, Japan
 SO Chem. Lett. (1975), (4), 331-4
 CODEN: CMLTAG
 DT Journal
 LA English

AB Me₃SiCN reacts with Schiff bases RR₁C:NR₂ (R, R₁, R₂ = e.g. H, Ph) and oximes R₂R₃C:NOH (R₂, R₃ = e.g. Me) in the presence of a catalytic amount of a Lewis acid to give RR₁C(CN)NHOSiMe₃, and R₂R₃C(CN)NHOSiMe₃, which were easily hydrolyzed to RR₁C(CN)NHR₃ and R₂R₃C(CN)NHOH.

=> D L24 ALL 1

L24 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 1999 ACS

AN 1999:795496 HCAPLUS

TI Reaction product derived from amine-functionalized elastomers and maleated polyolefins

IN Krom, James A.; Wang, Xiaorong

PA Bridgestone Corporation, Japan

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C08G081-02

CC 35 (Chemistry of Synthetic High Polymers)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | EP 964022 | A1 | 19991215 | EP 1999-111030 | 19990611 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| PRAI | US 1998-97035 | | 19980612 | | |
| AB | Unavailable | | | | |

*new reference -
indexing including
RN's not in file
yet*

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see HELP NEWS 351.

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| E6 | 1 | PN=DE | 3140570 |
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| E8 | 1 | PN=DE | 3140573 |
| E9 | 1 | PN=DE | 3140574 |
| E10 | 1 | PN=DE | 3140575 |
| E11 | 1 | PN=DE | 3140576 |
| E12 | 1 | PN=DE | 3140577 |

S1 1 PN="DE 3140565"

1/3/1

DIALOG(R) File 351:DERWENT WPI
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003679502

WPI Acc No: 83-39473K/198317

XRAM Acc No: C83-038523

Impact resistant thermoplastic moulding compsn. - contg. polyvinyl
aromatic-anhydride co-polymer and rubber with reactive unsatd. monomer

Patent Assignee: BASF AG (BADI)

Inventor: BRANDSTETT F; ECHTE A; HAMBRECHT J; MCKEE G E

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Main IPC | Week |
|------------|------|----------|-------------|------|------|----------|----------|
| DE 3140565 | A | 19830421 | | | | | 198317 B |

Priority Applications (No Type Date): DE 3140565 A 19811013
Language, Pages: DE 3140565 (18)

1/AB/1

DIALOG(R)File 351:(c) 1999 Derwent Info Ltd. All rts. reserv.

Abstract (Basic): DE 3140565 A

A thermoplastic moulding compsn. contains (A) 50-90wt.% of a copolymer of (a) 65-95wt.% of a monovinyl aromatic cpd., (a') 5-35% of an unsatd. dicarboxylic acid anhydride, and (a'') up to 20% of an acrylic acid ester or acrylonitrile, and (B) 10-50wt.% of a rubber, with glass temp. (Tg) not above 0 deg.C, consisting of (b') a 4-5C conjugated diene, a 1-8C alkyl acrylate, and up to 12C monovinyl aromatic cpd., acrylonitrile or a vinyl ether, and/or ethylene, propylene and a non-conjugated diene, and (b'') 0.5-5wt.% of an ethylenically unsatd. monomer with at least 1 terminal OH, SH or NHR gp., where R is H, 1-8C alkyl, aralkyl or aryl.

The compsns. are impact resistant, and have high heat distortion temp. and better mechanical properties.

S2 1 PN=EP 298370

2/3/1

DIALOG(R)File 351:DERWENT WPI
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007744355

WPI Acc No: 89-009467/198902

XRAM Acc No: C89-004378

High impact thermoplastic compsn. giving high gloss moulding - prepd. from vinyl-aromatic monomer, amine-terminated elastomer and maleic anhydride copolymer

Patent Assignee: BASF AG (BADI)

Inventor: BRONSTERT K; BUESCHL R; ECHTE A; SCHWABEN H; SCHWABEN H D

Number of Countries: 006 Number of Patents: 004

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Main IPC | Week |
|------------|------|----------|-------------|------|----------|-------------|----------|
| EP 298370 | A | 19890111 | EP 88110462 | A | 19880630 | | 198902 B |
| DE 3722500 | A | 19890119 | DE 3722500 | A | 19870708 | | 198904 |
| EP 298370 | B1 | 19921202 | EP 88110462 | A | 19880630 | C08F-279/02 | 199249 |
| DE 3876317 | G | 19930114 | DE 3876317 | A | 19880630 | C08F-279/02 | 199303 |
| | | | EP 88110462 | A | 19880630 | | |

Priority Applications (No Type Date): DE 3722500 A 19870708

Filing Details:

| Patent | Kind | Filing Notes | Application | Patent |
|-----------|------|--------------|-------------|--------|
| EP 298370 | A | | | |

Designated States (Regional): BE DE FR GB IT NL
EP 298370 B1
Designated States (Regional): BE DE FR GB IT NL
DE 3876317 G Based on EP 298370
Language, Pages: EP 298370 (G, 6); EP 298370 (G, 6)

2/AB/1

DIALOG(R) File 351:(c) 1999 Derwent Info Ltd. All rts. reserv.

Abstract (Basic): EP 298370 A

High impact thermoplastic moulding compsn. is produced by polymerising a mixt. of 80-96 (wt.)% 8-10C mono-vinyl-aromatic monomer(s) (I), 3-20% elastomer(s) (II) contg. butadiene and/or styrene and 0.5-10% other components. The novelty is that the polymer chain of the (II) component is terminated with prim. amino gps. and the (III) component is a copolymer contg. 8-10C vinyl-aromatic monomer(s) and maleic anhydride.

Reaction is carried out in the presence of additives, e.g. regulators, lubricants, stabilisers etc. Component (I) may also contain 15-40 % alpha, beta-unsatd. nitrile. Component (III) consists of 85-99.5% vinyl-aromatic monomer and 0.5-15% maleic anhydride units and opt. 15-40 % alpha, beta-unsatd. nitrile units.

USE/ADVANTAGE - The compsn. is claimed for use in the prodn. of mouldings. It is suitable for extrusion, injection moulding, calendering, blow moulding, pressing and sintering, esp. injection moulding of automobile components. High impact polystyrene or ABS can be produced using special elastomers, which can be mfd. reproducibly and economically and have low soln. viscosity. The rubber particles can be made finer, which increases the gloss.

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Abstract (Equivalent): EP 298370 B

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